

Claims

What is claimed is:

1. A method of scheduling a plurality of patients and a plurality of employees in a health care environment, wherein at least two patients receive treatment during a predetermined time period, said scheduling method comprising:

for each patient, evaluating patient care requirements, wherein the patient care requirements correspond to actual employee time requirements necessary to satisfy the patient care requirements;

in response to the patient care requirement evaluation, adjusting scheduling time of at least one patient to distribute the corresponding employee time requirements throughout a predetermined time period; and

scheduling employees in response to the distributed employee time requirements.

2. A method as defined in claim 1 wherein the predetermined time period is a day, the method further comprising:

dividing the day into intervals; and

in evaluating the patient care requirements, determining the patient care requirements on a per-interval basis.

3. A method as defined in claim 2 wherein the patient care requirements are averaged over more than one interval.

4. A method as defined in 1 wherein employee a plurality of job types are predetermined, each job type having a different patient care capability value associated with each job type and wherein the method further comprises:

scheduling shifts of employees based on job type;

5 scheduling employees based on scheduled job type.

5. A method as defined in claim 4 wherein the patient care capability value is averaged over an entire shift.

6. A method as defined in claim 1 wherein each employee has a predetermined patient care capability and wherein the method further comprises scheduling employees in relation to patient care capability.

7. A method as defined in claim 6 wherein the patient care capability relates to indirect and direct patient care activities.

8. A method as defined in claim 7 wherein each employee further has a predetermined non-patient care capability relating to performing non-patient care activities, and wherein the method further comprises:

5 calculating a staff efficiency valued based on scheduled activities, wherein the activities relate to patient care and non-patient care activities.

9. A method as defined in claim 1 further comprising:

dividing the predetermined time into intervals; and

displaying a plurality of patient schedules in relation to time to provide a visual indication of the patient care requirements for each interval.

10. A method as defined in claim 9 further comprising calculating patient requirement values related to required employee based on the patient care requirements for a plurality of intervals and displaying the calculated values.

11. A method as defined in claim 10 further comprising displaying employee shift information in relation to time to provide a visual indication of scheduled employee information in relation to scheduled patient information.

12. A method as defined in claim 11 further comprising:

calculating a total value of employee time for each interval;

displaying the calculated employee values;

comparing patient requirement values and employee values for each interval to

5 determine efficiency.

13. A computer program product readable by a computer and encoding instructions executing the method defined in claim 12.

14. A method as defined in claim 1 wherein the act of adjusting the scheduling times of the patients comprises staggering the start time of at least two patients to allow one employee to substantially service the needs of the at least two patients.

15. A computer program product readable by a computer and encoding instructions executing the method defined in claim 1.

16. A method as of scheduling employees in a health care environment comprising:

compiling a plurality of patient profiles, each profile associated with a different patient, and wherein each profile comprises information related to the direct patient care needs of the associated patient;

5 compiling a plurality of employee profiles, each profile associated with a different employee and wherein each profile comprises information related to the patient care capability of the associated employee;

calculating scheduling efficiency information relating to a generated schedule of patients and employees based on the patient profiles and employee profiles; and

10 adjusting the schedule to generate a more efficient schedule.

17. A method as defined in claim 16 wherein further comprising:

compiling facility information, the facility providing the health-care environment, and wherein the facility information relates to the limitations of the facility; and

calculating facility efficiency information in relation to the facility information
5 and the scheduling information.

18. A computer program product readable by a computer and encoding instructions executing the method defined in claim 16.✓

19. A system for scheduling employees in a health care environment comprising:

a memory store for storing patient information related to the needs of a plurality
5 of patients, resource information and employee information related to patient care capability of a plurality of patients;

a scheduling module that schedules patients and employees according to patient needs; and

a display unit for displaying the scheduled patient information in combination
10 with scheduled employee information, the display providing efficiency information.

20. A system as defined in claim 19 wherein the scheduling module further calculates the needs of each patient based on a per-interval basis and for calculating the employee capability on a per interval basis.

21. A system as defined in claim 20 wherein the calculated needs of the employees
15 and patients are displayed on the display unit.

22. A system as defined in claim 21 wherein scheduling module further calculates a comparison value related to patient requirements and employee capabilities for each interval, said comparison values displayed on the display unit.

23. A system as defined in claim 21 wherein the calculated values are automatically
5 updated and displayed following a modification to the patient schedule information.

24. A system as defined in claim 22 wherein the calculated values are automatically updated and displayed following a modification to the employee schedule information.

25. A graphical user interface for a computer system, the graphical user interface having a display module for displaying information; said graphical user interface comprising:

a patient schedule portion, the patient schedule portion logically divided into
5 intervals and displaying patient schedule information related to the intervals;

an employee schedule portion logically divided into intervals, wherein the intervals for the patient schedule portion correspond to the intervals for the employee information portion; and

a calculation display area for displaying calculated values within each interval, the
10 calculated values relating to patient care requirements and employee capabilities for each interval whereby the calculation display area provides efficiency information.

26. A graphical user interface as defined in claim 25 wherein the calculated values are automatically updated when the displayed information in either the patient schedule portion or the employee schedule portion is modified.